

ATTACHMENT II-1-10

MANAGEMENT OF WASTE CONTAINING POLYCHLORINATED BIPHENYLS  
(PCBs)

1. INTRODUCTION

This Attachment shall govern the acceptance, storage, and disposal of PCB wastes in the Mixed Waste Landfill Cell. This Attachment shall outline controls for the management of PCB wastes at the Permittee's facility by addressing areas of characterization, acceptance, unloading, handling, storage, spill prevention and containment, liquid content, and wind dispersal.

2. SCOPE

This Attachment shall apply to all PCB/Radioactive Waste or PCB/Mixed Waste received at the Permittee's facility for management in the Mixed Waste Landfill Cell and subject to the Ground Water Quality Discharge Permit UGW450005, as amended, the Radioactive Materials License UT 2300249, as amended, the TSCA Coordinated Approval and Waiver of Technical Requirements, as amended (TSCA Approval; February 20, 2002), this Permit, and the Approval Order from the Utah Division of Air Quality DAQE-834-98, as amended. The Permittee shall not use any provision in any other issued Permit or License to diminish or otherwise negate this Permit and its Attachments.

3. OBJECTIVES

Compliance with this Attachment is designed to prevent PCB waste from coming into direct contact with the environment and to protect human health. This Attachment outlines controls or requirements associated with:

- a. PCB Waste Identification (Section 4)
- b. Prohibitions (Section 5)
- c. PCB Characterization (Section 6)
  1. Pre-shipment Information
  2. Certifications
- d. PCB Waste Acceptance (Section 7)
  1. Incoming Load Inspections
  2. Free-Liquids and Leaking Shipments
  3. Discrepancy Resolution
- e. Frequency of Analysis and Sample Collection (Section 8)
  1. Non-Conforming Results
- f. PCB Waste Storage (Section 9)
  1. Facility Inspections
  2. PCB Waste Segregation
- g. PCB Waste Disposal (Section 10)

- 1. PCB Article Management
- h. Reporting and Notification (Section 11)
- i. Decontamination (Section 12)
- j. Reuse of PCB Containers (Section 13)
- k. Spill Response and Prevention (Section 14)
- l. Wind Dispersal Control (Section 15)
- m. Groundwater Monitoring (Section 16)
- n. Retention of Records (Section 17)

4. PCB WASTE IDENTIFICATION

- a. The Permittee shall only accept PCB wastes that are defined as PCB/Radioactive waste or PCB/Mixed Waste. PCB/Radioactive waste and PCB/Mixed Waste shall be defined as wastes that are characterized as radioactive or mixed and that also contain PCBs.
- b. PCB/Radioactive waste or PCB/Mixed Waste to be accepted for disposal shall be subject to the following definitions:
  - i. PCB – Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.
  - ii. PCB contamination levels shall be defined as follows:
    - 1. Non-PCB “Waste” – PCBs or PCB Items with PCB concentrations < 50 ppm that have not been diluted to attain the final concentration, or PCB Items in which the PCBs have been removed through the decontamination procedures of 40 CFR 761.79.
    - 2. PCB-Contaminated “Waste” – PCBs or PCB Items containing PCBs at concentrations  $\geq 50$  ppm but < 500 ppm, or a non-porous surface having a surface PCB concentration  $> 10 \mu\text{g}/100 \text{ cm}^2$  but  $< 100 \mu\text{g}/100 \text{ cm}^2$ , measured by a standard wipe test as defined in 40 CFR 761.123.
    - 3. PCB “Waste” – PCBs or PCB Items which contain PCBs at concentrations  $\geq 500$  ppm, or have surface PCB concentrations  $> 100 \mu\text{g}/100 \text{ cm}^2$  measured by a standard wipe test as defined in 40 CFR 761.123.
  - iii. PCB Item – Any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.

- iv. Drained – All free-flowing liquids have been removed from the PCB Item. Remaining liquid within the PCB Item shall be  $\leq$  one percent of the total volume of the PCB Item. The PCB Item shall be filled with sufficient absorbent material to absorb any remaining liquid.
- v. Flushed – After draining, the PCB Item has been filled with a solvent and allowed to stand for 18 continuous hours prior to the solvent being removed and disposed. This procedure shall be conducted in accordance with 40 CFR 761.60(b)(1)(i)(B).
- vi. Decontaminated – The appropriate procedures, defined in 40 CFR 761.79 are performed to remove PCBs from non-porous surfaces, concrete, and non-porous surfaces covered with a porous surface, such as paint or coating on metal.
- vii. General PCB Item definitions such as PCB Capacitors, PCB Articles, PCB Containers, and PCB Article Containers are found in 40 CFR 761.3.
- c. PCB/Radioactive Waste or PCB/Mixed Waste to be accepted for disposal shall either meet the criteria specified in R315-315-7 (4.d, below), or the TSCA Approval (4.e, below), or be acceptable at a municipal or non-municipal non-hazardous landfill (4.f, below), or meet the bulk waste descriptions in 4.g, below.
- d. The specific PCB waste types that meet the criteria in R315-315-7 shall include:
  - i. Any waste containing PCBs at concentrations  $< 50$  ppm (non-PCB) (R315-315-7(2)(a)).
  - ii. Intact, non-leaking PCB Small Capacitors from fluorescent lights (R315-315-7(2)(c)).
  - iii. PCB bulk product waste,
    - 1. defined as plastics (such as plastic insulation from wire or cable: radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; Galbestos; non-liquid building demolition debris; or non-liquid PCB bulk product waste from the shredding of automobiles or household appliances from which PCB small capacitors have been removed (shredder fluff). See R315-315-7(3)(b)(i) and R315-315-7(3)(b)(v) [40 CFR 761.62(b)(1)(i)]; or
    - 2. other PCB bulk product waste, sampled in accordance with the protocols set out in 40 CFR 761 Subpart R, that leaches PCBs at  $< 10$   $\mu\text{g/L}$  (10 ppb) of water measured using a procedure used to

simulate leachate generation. See R315-315-7(3)(b)(v) [40 CFR 761.62(b)(1)(ii)].

- iv. Drained PCB-Contaminated (PCB concentration  $\geq 50$  ppm and  $< 500$  ppm) Articles (including Electrical Equipment). See R315-315-7(3)(b)(ii) [40 CFR 761.60(b)(6)(ii)(A) and 761.60(b)(4)].
  - v. Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from cleanup activities of PCB remediation wastes. See R315-315-7(3)(b)(iv) [40 CFR 761.61(a)(5)(v)(A)].
  - vi. Non-liquid wastes from wastes generated as a result of research and development activities and chemical analysis of PCBs authorized under R315-315-7(3)(b)(vi) [40 CFR 761.64(b)(2)].
- e. Wastes that meet the TSCA Approval shall include:
- i. Drained PCB Articles that contained PCB concentrations  $\geq 500$  ppm. In accordance with 40 CFR 761.60(b), this includes:
    - 1. PCB Hydraulic Machines with PCB concentrations  $< 1,000$  ppm;
    - 2. PCB Hydraulic Machines with PCB concentrations  $\geq 1,000$  ppm that have been either flushed in accordance with 40 CFR 761.60(b)(1)(i)(B) or decontaminated in accordance with 40 CFR 761.79; and
    - 3. Drained PCB Electrical Equipment and other drained PCB Articles.
  - ii. PCB Transformers ( $\geq 500$  ppm) that have been drained and then flushed in accordance with 40 CFR 761.60(b)(1)(i)(B).
- f. Municipal and non-municipal non-hazardous landfill acceptable material shall include:
- i. any PCB Items that have been drained and decontaminated in accordance with 40 CFR 761.79 (see 40 CFR 761.79(a)(4));
  - ii. intact, non-leaking PCB Small Capacitors (see 40 CFR 761.60(b)(2)(ii)); and

- iii. drained PCB Containers that were used to contain PCBs at concentrations < 500 ppm, provided that all free-flowing liquid is drained from the container (see 40 CFR 761.60(c)).
  - 1. If the PCB Container also held other hazardous constituents, appropriate cleaning requirements for these other constituents shall be performed and documented.
- g. Bulk Wastes shall include:
  - i. Bulk remediation wastes with PCB concentrations < 50 ppm (40 CFR 761.61(a)(5)(i)(B)(2)(ii)); and
  - ii. Bulk remediation wastes with PCB concentrations  $\geq$  50 ppm. This waste shall be accepted for disposal in the Mixed Waste Landfill Cell. See 40 CFR 761.61(a)(5)(i)(B)(2)(iii).
  - iii. PCB bulk product waste, as defined in 40 CFR 761.3, may be disposed in the Mixed Waste Landfill Cell. This waste includes:
    - 1. the wastes described in 4.d.iii. of this Attachment;
    - 2. other PCB bulk product waste that leaches  $\geq$  10  $\mu\text{g/L}$  PCBs (e.g., paper or felt gaskets contaminated by liquid PCBs); and
    - 3. non-leaking fluorescent light ballasts containing PCBs in the potting material.
- h. The following groups of PCB waste have been derived from the acceptable wastes described in 4.d. through 4.g. of this Attachment:
  - i. Drained PCB Transformers ( $\geq$  500 ppm; flushed)
  - ii. Intact, non-leaking PCB Small Capacitors (including light ballasts with PCB concentrations < 50 ppm in the potting material)
  - iii. Drained PCB Hydraulic Machines ( $\geq$  50 ppm; flushed or decontaminated if  $\geq$  1,000 ppm)
  - iv. Other Drained PCB Articles ( $\geq$  500 ppm)
  - v. Drained PCB-Contaminated Articles, including Electrical Equipment ( $\geq$  50 ppm; < 500 ppm)
  - vi. Drained PCB Containers (contained PCBs at < 500 ppm)
  - vii. PCB Bulk Remediation Wastes (< 50 ppm; surface < 100  $\mu\text{g}/100\text{cm}^2$ )
  - viii. PCB Bulk Remediation Wastes ( $\geq$  50 ppm; surface  $\geq$  100  $\mu\text{g}/100\text{cm}^2$ )
  - ix. PCB Bulk Product Wastes (leaches < 10  $\mu\text{g/L}$  PCBs)
  - x. PCB Bulk Product Wastes (leaches  $\geq$  10  $\mu\text{g/L}$  PCBs)
  - xi. PCB Waste from Research & Development

- i. In accordance with 40 CFR 761.65(b)(2)(iii), the Permittee may store PCB and PCB contaminated wastes, prior to disposal, on permitted hazardous waste storage areas as long as any spills are cleaned up in accordance with 40 CFR 761, Subpart G (see Section 14 of this Attachment).

5. PROHIBITIONS

- a. The Permittee shall be prohibited from receiving liquids that contain PCBs except when the liquids are contained within intact, non-leaking PCB Small Capacitors.
- b. The Permittee shall be prohibited from receiving intact PCB Large Capacitors, as defined in 40 CFR 761.3.
- c. The Permittee shall be prohibited from receiving PCB Transformers ( $\geq 500$  ppm) that have not been flushed in accordance with 40 CFR 761.60(b)(1)(i)(B).
- d. The Permittee shall be prohibited from receiving PCB Hydraulic Machines with PCB concentrations  $\geq 1,000$  ppm that have not been either flushed in accordance with 40 CFR 761.60(b)(1)(i)(B) or decontaminated in accordance with 40 CFR 761.79.
- e. The Permittee shall be prohibited from receiving drained PCB Containers that contained PCBs at concentrations  $\geq 500$  ppm and have not been decontaminated in accordance with 40 CFR 761.79.
- f. The Permittee shall be prohibited from receiving PCB waste from a generator (or the generator's transporter) when there is not a current, valid, and acceptable Notice to Transport for the waste stream on file at the facility.
- g. The Permittee shall be prohibited from receiving PCB waste from a generator (or the generator's transporter) if a hazardous waste manifest is not included with the shipment.

6. PCB CHARACTERIZATION

- a. All shipments to the Mixed Waste facility that contain PCBs must include a hazardous waste manifest.
- b. Prior to shipment, the Permittee shall obtain a description of the material to be managed at the facility. This characterization is documented using a Waste Profile Record. Only waste classified into one (or more) of the groups in 4.h. of this Attachment shall arrive at the Permittee's facility. A single waste stream may contain several groups (see 4.h. of this Attachment) of PCB wastes.
- c. Pre-shipment information shall include PCB, Hazardous Waste, and Radioactive Waste characterizations, as applicable. These characterizations shall include

minimum sampling parameters and frequency as outlined in the appropriate Permit or License.

- i. PCB/Mixed Waste characterizations shall be performed in accordance with Attachment II-1, *Waste Analysis Plan*.
  - ii. PCB/Radioactive waste characterizations shall be performed in accordance with the Permittee's Radioactive Material License.
  - iii. PCB characterizations, when necessary, shall be performed using approved PCB sampling and testing methods provided in 40 CFR 761. These include:
    - 1. the container and electrical equipment sampling criteria in 40 CFR 761.60(g)(2)(ii);
    - 2. the extraction and analysis methods required in 40 CFR 761.61(a)(5)(i)(B)(2)(iv) and 40 CFR 761 Subparts N, O, P, and R; or
    - 3. an alternative extraction and analysis procedure validated under 40 CFR 761 Subpart Q.
- d. Flush/Decontamination Certifications
- i. The following certifications are required for each applicable PCB Item within a shipment:
    - 1. Flush certifications for PCB Transformers that contained PCBs at concentrations  $\geq 500$  ppm.
    - 2. Flush certifications or decontamination certifications for Hydraulic Machines with PCB concentrations  $\geq 1,000$  ppm.
    - 3. Decontamination certifications for PCB Containers that contained PCBs at concentrations  $\geq 500$  ppm.
  - ii. Certifications shall consist of the following:
    - 1. A unique identification number for each PCB Item that was flushed/decontaminated;
    - 2. A statement that the flush/decontamination was performed in accordance with the appropriate regulations (see definitions in 4.b. of this Attachment);

3. The date that the flush/decontamination was performed; and
  4. An authorized signature and date signed.
- e. PCB characterization analyses shall not be required; however, if PCB analyses are not performed and/or included on the Waste Profile Record the following concentrations shall be assumed:
- i. Transformers contained PCBs  $\geq 500$  ppm and flush certifications shall be required.
  - ii. Hydraulic Machines are contaminated at PCB concentrations  $\geq 1,000$  ppm and flush or decontamination certifications shall be required.
  - iii. PCB Containers contained PCBs at concentrations  $\geq 500$  ppm and decontamination certifications shall be required.
  - iv. PCB Bulk Remediation Wastes have concentrations  $\geq 50$  ppm and shall be disposed in the Mixed Waste Landfill Cell.
  - v. PCB bulk product waste (other than those listed in 4.c.iii) leaches PCBs  $\geq 10$   $\mu\text{g/L}$  and shall be disposed in the Mixed Waste Landfill Cell.
- f. If a PCB waste analysis is provided, the PCB waste shall not be diluted in order to avoid any provision of specifying a PCB concentration in accordance with 40 CFR 761. PCB concentration determination shall be made from “as-found” sampling. Re-sampling of waste in containers shall not be considered “as-found” sampling.
- g. Chemical analysis used for PCB quantitation shall be reported on a dry/weight or wet/weight basis as determined by the PCB waste form.
- h. Approved analytical laboratories used shall hold a current National Environmental Laboratory Accreditation Conference (NELAC) accreditation -- OR -- shall hold a current certification for PCBs from the Utah Department of Health (UDOH) insofar as such official certifications are given. If a laboratory certification other than UDOH is used, the Permittee shall require the generator to supply as part of pre-acceptance and analytical documentation, the most current QA/QC system and performance audit documents that pertain to PCBs.
- i. The Permittee shall make PCB waste management decisions based only on proper, accurate, and valid analytical data and information (including flush and decontamination certifications), and/or the conservative assumptions described in 6.d. of this Attachment.



- j. Only after the PCB components of the waste are characterized, analyzed (if necessary), and meet all the provisions of this Attachment, this Permit, and other allied Licenses and Permits, shall the Permittee provide the generator with a Notice to Transport. The Notice to Transport shall indicate that these are wastes containing PCBs.
- k. The generator/transporter(s) shall attach a PCB marker to all articles, equipment, and containers in accordance with 40 CFR 761.40. If the generator/transporter(s) is not required to attach a PCB marker in accordance with 40 CFR 761.40, the Permittee shall place a label identifying the waste as PCB waste on each container, similar to the requirements of 40 CFR 761.45, as the PCB waste arrives on site.

7. PCB WASTE ACCEPTANCE

- a. Waste containing PCBs shall be transported to the Permittee's facility in either PCB Containers or in lined containers (PCB Article Containers). The PCB Container or liner shall be of suitable material and construction to prohibit the release of PCB waste or non-waste materials at any time during transport or storage.
- b. The container requirements of 7.a. are not applicable to large PCB Articles or Equipment.
- c. Incoming PCB Item shipments shall contain flush and/or decontamination certifications, as appropriate, for each PCB Item requiring certification (see 6.c. of this Attachment).
- d. All PCB shipments destined for disposal in the Mixed Waste Landfill Cell shall be weighed (in kilograms) and/or counted upon arrival at the Permittee's facility
  - i. The Permittee shall use the following criteria to determine whether a count/weight discrepancy exists between the manifest and the shipment:
    - 1. For bulk shipments, variations greater than 10 percent in weight.
    - 2. For PCB Item shipments, any variation in piece count, such as a discrepancy of one PCB Item in a truckload.
    - 3. For containerized shipments,
      - A. any variation in piece count, such as a discrepancy of one PCB Container in a truckload; and
      - B. variations greater than 10 percent in weight of PCB waste in containers.

- ii. Discrepancy resolution shall be conducted in accordance with 7.h. of this Attachment for PCB/Mixed Waste or 7.j. of this Attachment for PCB/Radioactive Waste.
- e. Incoming Load Inspections
  - i. The Permittee shall perform an initial inspection of the shipment and shipping papers for compliance with this Permit, Department of Transportation (DOT) and Division of Radiation Control (DRC) shipment regulations. Instances of non-compliance shall be recorded in the facility operating record.
  - ii. Shipments shall be visually inspected and documented to confirm that the PCB waste meets the PCB waste group(s) as profiled in the Waste Profile Record (see 6.b. of this Attachment) and that no other PCB waste classifications are present in the shipment.
  - iii. Shipments shall be visually inspected and inspection documented to assure that the waste liner, when used, has not been breached and PCB waste has not come into contact with the container.
    - 1. If the PCB container or liner has been breached, the Permittee shall examine the analytical results for the waste within the PCB Container. If analytical results are not available, the waste shall be assumed to contain the concentrations detailed in 6.d. of this Attachment.
      - A. If the waste within the PCB Container has a PCB concentration  $< 500$  ppm, the PCB Container may be either
        - (1) disposed within the Mixed Waste Landfill Cell; or
        - (2) reused in accordance with Section 13 of this Attachment.
      - B. If the waste within the PCB Container has a PCB concentration  $\geq 500$  ppm, the PCB Container may be either
        - (1) decontaminated in accordance with Section 12 of this Attachment; or
        - (2) appropriately labeled and reused in accordance with Section 13 of this Attachment.

- C. If it is unknown whether the PCB concentration of the waste within the PCB Container is  $< 500$  ppm, the Permittee shall either
  - (1) assume the waste within the PCB Container has a PCB concentration  $\geq 500$  ppm and manage the PCB Container in accordance with 7.e.iii.1.B. of this Attachment; or
  - (2) sample and analyze the waste within the PCB Container to determine the PCB concentration. If results from this analytical show PCB concentrations  $< 500$  ppm, the PCB Container may be managed in accordance with 7.e.iii.1.A. of this Attachment. Otherwise the PCB Container shall be managed in accordance with 7.e.iii.1.B. of this Attachment.
- 2. The Permittee shall immediately withdraw its Notice to Transport to any generator whose PCB waste shipment has a container that has been breached. The Permittee shall not reinstate the Notice to Transport or issue a new Notice to Transport until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.
- iv. Drained PCB Items shall be visually inspected to confirm that they are drained and that no free-flowing liquids are present.
- v. PCB Articles and PCB Containers shall be visually inspected for the occurrence of potential external contamination (stains). All potential external contamination shall be noted in the operating record.
  - 1. Stains may be minor or major in accordance with the following definitions:
    - A. Minor Stains shall be defined as local staining around openings with no signs of contamination unevenly distributed away from the opening (e.g., signs of contamination running down the sides of the item).
    - B. Major Stains shall be defined as external contamination not associated with openings and/or signs of contaminant leakage unevenly distributed away from openings (i.e., not minor).

2. Intact PCB Small Capacitors with stains shall be sampled for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyzed for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272). If any PCBs are detected from the analytical swipe and the contamination source is unknown, the capacitor shall be rejected as a leaking PCB Small Capacitor and shall be returned to the generator.
  3. PCB Articles exhibiting major or minor stains that are not disposed on the date of arrival (see 10.c. of this Attachment) shall either be:
    - A. sampled for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyzed for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272);
    - B. decontaminated (double wash/double rinse) in accordance with Section 12 of this Attachment; or
    - C. isolated from wastes that do not contain PCBs within the storage area so that liquids generated from PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see 9.g. of this attachment).
  4. If the analytical results from 7.e.v.3.A. show PCB concentrations  $> 10 \mu\text{g}/100 \text{ cm}^2$ , the PCB Article shall be either:
    - A. decontaminated in accordance with Section 12 of this Attachment; or
    - B. isolated from wastes that do not contain PCBs within the storage area so that liquids generated from PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see 9.g. of this Attachment).
  5. Major stains that exhibit wipe test PCB concentrations  $> 10 \mu\text{g}/100 \text{ cm}^2$  or that are decontaminated constitute a shipment discrepancy and the generator shall be notified. The Executive Secretary shall also be notified within 24 hours of receipt of analytical results or completion of decontamination activities.
- f. Shrink-Wrapped PCB Articles
- i. The inspection requirements of 7.e.i. through 7.e.iii. shall be followed for shrink-wrapped PCB Articles.

- ii. Shrink-wrapped PCB Articles that have not been certified clean through visual inspection, wipe test sampling, decontamination, or generator surface decontamination certifications and that are placed into storage shall be isolated from wastes that do not contain PCBs within the storage area so that liquids generated from the shrink-wrapped PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see 9.h. of this Attachment).
- iii. If potential major stains (defined in 7.e.v.1.) are noted through the shrink-wrap and the PCB Article is not disposed on the date of arrival (see 10.c. of this Attachment), the generator shall be notified and asked to provide a certification that the external surface of the PCB Article has been inspected and/or decontaminated in accordance with 40 CFR 761.79.
  - 1. If a surface decontamination certification is not provided, the Permittee shall either
    - A. maintain isolation (from wastes that do not contain PCBs) of the PCB Article until disposal is accomplished; or
    - B. remove the shrink-wrap from the stained area and either
      - (1) sample for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyze for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272); or
      - (2) decontaminate (double wash/double rinse) in accordance with 40 CFR 761.375.
    - C. If the analytical results from 7.f.iii.1.B.(1) show PCB concentrations  $> 10 \mu\text{g}/100 \text{ cm}^2$ , the PCB Item shall either be:
      - (1) decontaminated in accordance with Section 12 of this Attachment; or
      - (2) kept in isolation from wastes that do not contain PCBs.
  - 2. Major stains that exhibit wipe test PCB concentrations  $> 10 \mu\text{g}/100 \text{ cm}^2$  or that are decontaminated constitute a shipment discrepancy and the generator shall be notified. The Executive Secretary shall also be notified within 24 hours of receipt of analytical results or completion of decontamination activities.

- iv. Shrink-wrapped PCB Articles that have been released from the isolation restrictions shall be marked accordingly.
- g. PCB/Mixed Waste Acceptance
  - i. Incoming shipments shall be sampled in accordance with 8.b. of this Attachment and shall be analyzed for incoming acceptance parameters as described in Attachment II-1, *Waste Analysis Plan*.
  - ii. The Permittee shall visually inspect each shipment for free liquids in accordance with Attachment II-1, *Waste Analysis Plan*.
  - iii. If free liquids are present, the shipment shall be rejected for receipt and disposal and the waste shall be returned to the generator.
  - iv. If a shipment arrives in a leaking condition, the Permittee shall manage the leaking shipment in accordance with Attachment II-6, *Contingency Plan*.
  - v. When a determination has been made to reject a shipment, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.
  - vi. Shipments of PCB Mixed Waste which remain in transportation equipment or vehicles (rail cars, flatbeds, vans, trucks, etc.) and which are awaiting analyses or results may remain at the Permittee's facility for up to ten days. Additional time may be granted if requested, in writing, prior to the conclusion of the ten day period and approved by the Executive Secretary.
- h. PCB/Mixed Waste Discrepancy Resolution
  - i. Where discrepancies are identified, the discrepancies shall be noted in the operating record and resolved with the generator.
  - ii. Discrepancies shall be addressed, resolved, and documented in the Operating Record prior to disposal.
  - iii. Shipments with discrepancies may be placed in storage pending resolution. These shipments shall not be stored for a period greater than 90 days without prior Executive Secretary approval.

- iv. After discrepancies have been addressed and resolved, the shipment shall be managed in accordance with this Attachment.
  - v. Discrepancies, such as simple, non-factual typographical errors that are overlooked or discovered at a later date, shall be resolved by making corrections as information becomes available. Corrections shall be initialed and dated.
  - vi. Discrepancies that change the required management of waste shall be resolved as required by 8.c.ii. of this Attachment.
  - vii. If a shipment involves containers that are not in good condition (e.g., rusting that represents a structural problem or that compromises containment of the waste, apparent structural defects, etc.) or if containers are leaking, the Permittee shall immediately transfer the waste from such containers to containers that are in good condition or otherwise manage the affected waste in accordance with the requirements of Attachment II-6, *Contingency Plan*, and if necessary, arrange for the return of the shipment to the generator. After two such occurrences from a generator, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.
  - viii. Appearance discrepancies other than an appearance discrepancy with the profiled PCB waste group, may be resolved by adding information to the Waste Profile Record following consultation with the generator. Such additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.
  - ix. If the Permittee accepts a waste with a discrepancy and the discrepancy is not resolved with the generator within 15 days after receiving the waste, the Permittee shall submit to the Executive Secretary a copy of the manifest or shipping paper at issue and a letter describing the discrepancy and attempts to reconcile it. This action shall be performed within three days after the 15 day time limit has expired.
  - x. When corrections or information are added to the manifest by the Permittee, initials and a date shall be included with the notation. Such additional information shall be acknowledged by the generator's signature, identifying that information as true and correct.
- i. PCB/Radioactive Waste Acceptance

- i. Incoming shipments shall be sampled in accordance with 8.c. of this Attachment and shall be analyzed in accordance with the Waste Characterization Plan currently approved in the Permittee's Radioactive Materials License.
  - ii. The Permittee shall visually inspect each shipment for free liquids and perform the Paint Filter Liquids Test as required.
  - iii. If free liquids are present, the shipment shall be rejected for receipt and the waste shall be returned to the generator.
  - iv. If a shipment arrives in a leaking condition, the Permittee shall manage the leaking shipment in accordance with Attachment II-6, *Contingency Plan*.
  - v. When a determination has been made to reject a shipment, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.
  - vi. Shipments of PCB waste that remain in transportation equipment or vehicles (rail cars, flatbeds, vans, trucks, etc.) and that are awaiting analyses or results may remain at the Permittee's facility for up to 10 days. Additional time may be granted if requested, in writing, prior to the conclusion of the 10 day period and approved by the Executive Secretary.
- j. PCB/Radioactive Waste Discrepancy Resolution
- i. Where discrepancies are identified, the discrepancies shall be noted in the operating record and resolved with the generator.
  - ii. Discrepancies shall be addressed and resolved prior to disposal.
  - iii. Shipments with discrepancies may be placed in storage pending resolution. These shipments shall not be stored for a period greater than 90 days without prior Executive Secretary approval.
  - iv. After discrepancies have been addressed or resolved, the shipment shall be managed in accordance with this Attachment.
  - v. Discrepancies, such as simple, non-factual typographical errors that are overlooked or discovered at a later date, shall be resolved by making corrections as information becomes available. Corrections shall be initialed and dated.



- vi. Discrepancies that change the required management of waste shall be resolved as required by 8.c.ii. of this Attachment.
- vii. If a shipment involves containers that are not in good condition (e.g., rusting that represents a structural problem or that compromises containment of the waste, apparent structural defects, etc.) or if containers are leaking, the Permittee shall immediately transfer the waste from such containers to containers that are in good condition or otherwise manage the affected waste in accordance with the requirements of Attachment II-6, *Contingency Plan*, and if necessary, arrange for the return of the shipment to the generator. After two such occurrences from a generator, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.
- viii. Appearance discrepancies, other than an appearance discrepancy with the PCB classification profile, may be resolved by adding information to the Waste Profile Record following consultation with the generator. Such additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.
- ix. If the Permittee accepts a waste with a discrepancy and the discrepancy is not resolved with the generator within 15 days after receiving the waste, the Permittee shall submit to the Executive Secretary a copy of the manifest or shipping paper at issue and a letter describing the discrepancy and attempts to reconcile it. This action shall be performed within three days after the 15 day time limit has expired.
- x. When corrections or information are added to the manifest by the Permittee, initials and a date shall be included with the notation. Such additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.
- k. Requirements for PCB Radioactive Waste and PCB Mixed Waste with debris:
  - i. When PCB waste shipments contain material from the list of debris identified in vi., below, and when these materials cannot be sampled reasonably and representatively, the Site Manager or authorized designee may waive the sampling and analysis of the non-samplable portion of the PCB waste shipment.

- ii. For PCB bulk product and PCB remediation wastes as defined in Section 4 of this Attachment, the generator may waive the PCB sampling and analytical requirements if the PCB concentration is assumed to be  $\geq 50$  ppm.
- iii. PCB sampling and analysis may be waived for intact, non-leaking PCB Small Capacitors, drained PCB-Contaminated Articles and Electrical Equipment, drained PCB Transformers, and other drained PCB Articles.
- iv. PCB sampling/analysis waivers shall be documented, with an explanation and justification, and maintained in the Operating Record.
- v. A copy of the sampling/analysis waiver shall be sent to the Executive Secretary in accordance with Condition II.M.2. of this Permit.
- vi. Debris:
  - 1. Commercial shaped solid-phase metals (excluding TCLP-related metals, e.g. lead)
  - 2. Wood (excluding sawdust or shavings)
  - 3. Concrete
  - 4. Brick
  - 5. Stone
  - 6. Glass
  - 7. Plastic
  - 8. Rubber
  - 9. Boots
  - 10. Suits
  - 11. Gloves
  - 12. Sheet metal
  - 13. Construction debris
  - 14. Building debris
  - 15. Empty containers
  - 16. Wire

8. FREQUENCY OF ANALYSES AND SAMPLE COLLECTION REQUIREMENTS

- a. One rail car (any type) may represent a nominal 100 cubic yards; multiple intermodal containers upon a railcar may represent a nominal 20 cubic yards per intermodal container; and one highway shipment (any type) may represent a nominal 20 cubic yards. The Permittee may alternatively use the actual volumes for counting purposes. The Permittee shall indicate the use of actual or nominal volumes in the operating record and in any reports or documents required by this Permit, or requested by the Executive Secretary.
- b. PCB/Mixed Waste

- i. On-site sampling and analysis of PCB waste in rail cars shall occur within five days of arrival to the Permittee's-operated spur.
  - ii. For rail shipments, if following receipt of analytical results the waste in holding is not acceptable, the Permittee shall document the waiver in the Operating Record, within five days or return the waste to the generator, or transport the waste to another approved facility within 15 days of receipt of analytical results.
  - iii. For each waste stream, sampling frequency shall be performed in accordance with Attachment II-1, *Waste Analysis Plan*.
- c. PCB/Radioactive Waste
- i. Sample Collection Requirements. For sampling of PCBs in PCB waste types when required to verify PCB/Radioactive waste characterization, the Permittee shall follow the current Waste Characterization Plan approved under its Radioactive Material License.
  - ii. Non-Conforming Results:
    - 1. If a discrepancy exists between the PCB/Radioactive Waste profiled and the PCB/Radioactive Waste received, the Permittee shall perform the following:
      - A. Within 24 hours of discovering that non-conforming material has been disposed, the Permittee shall notify the Utah Division of Solid and Hazardous Waste, and the Utah Division of Radiation Control of the situation.
      - B. Within 24 hours of discovering that waste applicable to the TSCA Approval had been disposed in an area of the facility other than the Mixed Waste Landfill Cell, the Permittee shall notify the Utah Division of Solid and Hazardous Waste, the Utah Division of Radiation Control, and Region VIII of the Environmental Protection Agency of the non-conformance.
      - C. Within seven calendar days of the notice in A or B, above, the Permittee shall provide the Utah Division of Solid and Hazardous Waste, the Utah Division of Radiation Control, and Region VIII of the Environmental Protection Agency with a written description of the situation. The following information shall be included in the written description:

- (1) Name of Generator;
- (2) Name of Non-Conforming PCB Waste Stream;
- (3) Amount of Non-Conforming Disposed PCB Waste;
- (4) Location of Non-Conforming PCB Waste in Disposal Cell;
- (5) Date Non-Conforming PCB Waste was Accepted;
- (6) Date Non-Conforming PCB Waste was Placed in Disposal Cell;
- (7) Description of Waste Placed on and Around Non-Conforming PCB Waste;
- (8) Plan of Action for Resolving Non-Conformance; and
- (9) Compliance Schedule.

9. PCB WASTE STORAGE

- a. Upon acceptance of a shipment, the Permittee shall manage PCB waste as either bulk PCB waste, containerized PCB waste, drained PCB Transformers, drained PCB Articles, or intact, non-leaking PCB Small Capacitors.
- b. PCB/Radioactive Waste received in railcars at the Mixed Waste Facility shall be managed in accordance with Attachment III-1, *Container Management Plan*, of this Permit.
- c. Containerized PCB/Radioactive Waste shall only be stored within permitted Mixed Waste Storage Areas.
- d. Containerized PCB/Mixed Waste shall only be stored within permitted Mixed Waste Storage Areas.
- e. Drained PCB Transformers, other drained PCB Articles, and intact, non-leaking PCB Small Capacitors shall only be stored within permitted Mixed Waste Storage Areas.
- f. PCB waste shall be segregated in storage areas from other waste. Segregation shall be performed using rope or jersey barriers.
- g. Drained PCB Transformers, other drained PCB Articles, and intact PCB Small Capacitors that have potential external contamination (staining) awaiting analytical results or decontamination (see 7.e.v. of this Attachment) shall be isolated from wastes that do not contain PCBs within the storage area so that all liquid contamination generated from these items shall be contained and absorbed (or otherwise managed) separately from other storage area liquid accumulation.
- h. Shrink-wrapped PCB Transformers, other shrink-wrapped drained PCB Articles, and shrink-wrapped intact PCB Small Capacitors that do not have a generator

surface decontamination certification (see 7.f.iii of this Attachment) shall be isolated from wastes that do not contain PCBs within the storage area so that all liquid contamination generated from these items shall be contained and absorbed (or otherwise managed) separately from other storage area liquid accumulation.

- i. The Permittee shall clearly mark the locations of PCB wastes from different generators. In order to clearly identify the generator number and the date on which PCB waste was unloaded, the Permittee shall mark or place legible labels on containers placed into storage.
- j. Large PCB Articles and Equipment shall be managed to prevent damage to the storage area surface. If damage occurs, the PCB Item shall immediately be moved to another location and the damaged area shall be isolated from the rest of the storage area so that liquid accumulation from other areas shall not contact the damaged area.
- k. PCB waste shall be disposed within one year of acceptance at the Permittee's facility unless additional time is requested, in writing, prior to the conclusion of the one year period and approved by the Executive Secretary.
- l. Any storage area containing PCB waste shall be inspected to ensure that the waste is properly stored and that PCB Containers and/or PCB Items are not leaking. Storage area inspections shall be conducted daily, as part of the General Facility Inspection, in accordance with Attachment II-3, *Site Inspection Plan*.
- m. If PCB Containers or PCB Items show evidence of leakage other than a stain, the Permittee shall implement Attachment II-6, *Contingency Plan*. Spills shall be cleaned in accordance with Section 14 of this Attachment.
- n. Leaking PCB Containers or PCB Items shall be isolated from wastes that do not contain PCBs so that all liquid contamination from these items shall be contained and absorbed separately from other storage area liquid accumulation. By definition (40 CFR 761.3), external PCB contamination (stains) upon PCB Items constitutes a leaking condition.

10. PCB WASTE DISPOSAL

- a. Bulk shipments of PCB bulk product and PCB remediation waste shall be offloaded and directly disposed within the Mixed Waste Landfill Cell provided that the bulk waste shipment has been accepted by the Permittee and met applicable provisions of this Permit, the TSCA Approval, and allied Licenses or Permits.
- b. PCB Waste, including drained PCB Transformers, other drained PCB Articles, and intact non-leaking PCB Small Capacitors, shall be disposed within the Mixed Waste Landfill Cell in accordance with Module V, *Disposal in Landfills*.

- c. Drained PCB Transformers and other drained PCB Articles that have staining (minor or major), as defined in 7.e.v.1. of this Attachment, may be placed in the Mixed Waste Landfill Cell without further sampling or decontamination provided that the PCB Item is placed into final disposal position on the same day that the PCB Item was unloaded from the transport vehicle.
- d. Shrink-wrapping may be cut or removed during placement of PCB Items in the Mixed Waste Landfill Cell in order to provide a free-flowing pathway for CLSM.
- e. Radiation Work Permits (RWPs) shall be developed and issued for the disposal of PCB Waste. RWPs shall be prepared as follows:
  - i. The Waste Profile Record shall be evaluated to determine material hazards for the waste stream.
  - ii. All applicable regulations e.g., OSHA, TSCA, etc. shall be reviewed for each material hazard to designate the proper personal protective equipment and handling techniques for PCB Waste.
  - iii. An RWP shall be prepared and issued.
  - iv. Copies of the current active RWPs issued under this Attachment shall be posted within the Mixed Waste Operations Building while in effect.
- f. Disposal lift areas containing PCBs shall be covered with six inches of soil (non-PCB soil) to secure the exposed materials at the end of each working day.
  - i. When waste is comprised of debris, etc. the material shall be blended with fill material. The blending provides security for the exposed materials and shall function equivalent to covering the PCBs with six inches of soil.
  - ii. After the blending has been completed the lift area(s) shall be visually inspected for the presence of dispersible debris. If dispersible debris is visible the dispersible debris shall be covered with a sufficient quantity of additional soil to secure the dispersible debris prior to the end of the work day.
- g. Drained PCB Transformers, other drained PCB Articles, and intact, non-leaking PCB Small Capacitors shall not require a covering. These items may be placed in the cell in preparation of a CLSM pour for final disposal without cover.
- h. MACRO forms and other large debris that are not wind dispersible shall not require a covering. These items may be placed in the cell in preparation of a CLSM pour for final disposal without cover.

- i. Landfill leachate collected from sump areas that contain PCB Waste shall be analyzed for PCBs semi-annually. The practical quantitation limit for this analysis shall be 0.6 µg/l (0.6 ppb). This analysis shall be performed semi-annually.
- j. Within 30 days of the date of disposal of each item of PCB waste identified on a manifest, the Permittee shall prepare and provide to the generator a Certificate of Disposal in accordance with 40 CFR 761.218. The Certificate of Disposal shall include:
  - i. the identity of the disposal facility by name, address, and EPA identification number;
  - ii. the identity of the PCB waste affected by the Certificate of Disposal including reference to the manifest number for the shipment;
  - iii. a statement certifying the fact of disposal of the identified PCB waste, including the date(s) of disposal; and
  - iv. certification language defined in 40 CFR 761.3.
- k. Certificates of Disposal shall be maintained in the operating record.

11. REPORTING AND NOTIFICATION REQUIREMENTS

- a. The Permittee shall submit to the Executive Secretary and to Region VIII of the Environmental Protection Agency an annual report on the amount of PCB waste received for the preceding calendar year on or before the 31<sup>st</sup> of March. The Executive Secretary may add or remove reporting elements to this report. This report shall contain the following elements, at a minimum:
  - i. summary of PCB waste amounts received and disposed by the PCB waste groups as described in 4.h. of this Attachment for each generator. At a minimum, this report shall contain all of the information required in 40 CFR 761.180(b) for a disposer and commercial storer of PCB waste;
  - ii. the amount of PCB waste rejected by the Permittee, by generator;
  - iii. the amount of PCB waste generated at the facility; and
  - iv. the amount of PCB waste spilled at the site.
- b. The Permittee shall monitor and report leachate collection removal volumes in accordance with Module V, *Disposal in Landfills*, Conditions V.F.1. and V.F.2. of this Permit.

- c. Semi-annual Soil Monitoring shall be performed in accordance with the Environmental Monitoring Program. Soil samples obtained from soil monitoring locations shall be analyzed for PCBs.
  - i. If PCBs are detected in the soil samples, the Executive Secretary shall be notified within seven days of discovery.
  - ii. Copies of results shall be submitted to the Executive Secretary, annually on or before the 31<sup>st</sup> of March.
- d. The Permittee shall submit groundwater and leachate monitoring data to the Executive Secretary and Region VIII of the Environmental Protection Agency on a semi-annual basis.
  - i. The reports should include, at a minimum, groundwater elevations for monitoring wells, analyses for PCBs, pH, specific conductance, chlorinated organics, and volumes of leachate collected from the sumps.
  - ii. The detection limits and report schedule shall conform to the requirements in Module V, *Disposal in Landfills*, and Module VI, *Groundwater Monitoring*.
  - iii. If the Permittee detects chlorinated organics at any leachate sump or monitoring well, the Executive Secretary and Region VIII of the Environmental Protection Agency shall be notified within seven days of the discovery.
  - iv. Groundwater and leachate monitoring data may be submitted in an electronic format.
- e. The Permittee shall submit leachate collection/removal volumes for each collection or leak detection sump to Region VIII of the Environmental Protection Agency on a quarterly basis (no later than 20 days following the end of the quarter).
  - i. Leachate collection/removal volumes data may be submitted in an electronic format.
  - ii. If the Permittee discovers the presence of liquid in the second-lowest leak detection system in quantities greater than fifteen gallons per acre per day; or if the Permittee discovers the presence of liquid in the lowest leak detection system in quantities greater than ten gallons per acre per day; the Permittee shall notify Region VIII of the Environmental Protection Agency within 72 hours of discovery.



- iii. If corrective action is required in accordance with Module V, *Disposal in Landfills*, or Module VI, *Groundwater Monitoring*, the Permittee shall report all activities to Region VIII of the Environmental Protection Agency.
- f. The Permittee shall notify Region VIII of the Environmental Protection Agency, in writing, in advance of any pending amendment to this Permit that involves conditions found at 40 CFR 761.75, or contains any new provisions concerning PCB waste which is not included in 40 CFR 761.75., which also requires Environmental Protection Agency approval, or which would be less stringent than a requirement of the regulations in 40 CFR 761.
- g. For other modifications of existing conditions affecting PCB waste requirements, the Permittee shall notify Region VIII of the Environmental Protection Agency before or within five calendar days of the changes in this Permit.

12. DECONTAMINATION

- a. Decontamination activities shall be performed in accordance with 40 CFR 761.79.
- b. The Permittee shall not conduct or use decontamination methods not covered by 40 CFR 761 without prior written approval of the Executive Secretary.
- c. Decontamination of minor and major stains on PCB Items (see 7.e.v. of this Attachment) shall use the double wash/double rinse method of 40 CFR 761.375.
- d. Decontamination activities should use methods that minimize the use of water or solvents and the release of PCBs to the environment.
- e. The shipping containers of PCB Bulk Product Waste as defined in R315-315-7 shall be deemed decontaminated after removal of all visible remnants of bulk debris.
- f. PCB Liquid waste generated from the use of water or solvents shall be managed as “decontamination waste and residues” in accordance with 40 CFR 761.79(g) and other applicable regulations.

13. REUSE OF CONTAINERS THAT HELD PCBs

- a. Containers that held PCB wastes that came in direct contact with the container shall only be used for storage and transportation of post treatment wastes at the Mixed Waste Facility unless approved in writing by the Executive Secretary.
- b. Containers that held PCB wastes shall be RCRA empty [defined in R315-2-7(b)(1)] prior to use with another waste stream.

- c. Reused containers under this Section, shall be labeled as PCB-reused, stored, and disposed in accordance with this Attachment.
- d. Reused containers that previously held PCBs at concentrations  $\geq 500$  ppm shall additionally be labeled as PCB Contaminated.
- e. Containers that held PCB wastes for reuse shall not be released from the restricted area.
- f. Reused PCB Contaminated containers (see d.) shall be decontaminated in accordance with 40 CFR 761.79 prior to disposal in the Mixed Waste Landfill Cell.

14. SPILL RESPONSE AND PREVENTION

Spill response shall be conducted in accordance with Attachment II-6, *Contingency Plan*, and 40 CFR 761 Subpart G. All contaminated PPE from spill response shall be managed as part of the waste stream clean up.

15. WIND DISPERSAL

Lift areas containing materials susceptible to wind dispersal shall be covered in accordance with 10.f. of this Attachment.

16. GROUND WATER MONITORING

Ground Water Monitoring shall be performed in accordance with Module VI of this Permit. PCB analysis shall be performed using SW-846 Test Method 8082 or equivalent Test Method approved in writing by the Executive Secretary. The Ground Water Protection Level (GWPL) for Polychlorinated Biphenyls shall be 2.5 micro-g/l (2.5 ppb). The Practical Quantitation Limit (PQL) shall be 0.6  $\mu\text{g/l}$  (0.6 ppb).

17. RETENTION OF RECORDS

The Permittee shall retain Waste Profile Records, records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this Permit, and inspection records as part of the operating record of this Permit.

END OF ATTACHMENT II-1-10